



ENERGY STAR® Program Requirements for Light Commercial HVAC

Partner Commitments Version 2.0 – FINAL DRAFT

Commitment

The following are the terms of the ENERGY STAR Partnership Agreement as it pertains to the manufacturing of ENERGY STAR qualified light commercial HVAC equipment. The ENERGY STAR Partner must adhere to the following program requirements:

- comply with current ENERGY STAR Eligibility Criteria, defining the performance criteria that must be met for use of the ENERGY STAR certification mark on light commercial HVAC equipment and specifying the testing criteria for light commercial HVAC equipment. EPA may, at its discretion, conduct tests on products that are referred to as ENERGY STAR qualified. These products may be obtained on the open market, or voluntarily supplied by Partner at EPA's request;
- comply with current ENERGY STAR Logo Use Guidelines, describing how the ENERGY STAR labels and name may be used. Partner is responsible for adhering to these guidelines and for ensuring that its authorized representatives, such as advertising agencies, dealers, and distributors, are also in compliance;
- qualify at least one ENERGY STAR labeled light commercial HVAC model within one year of activating the light commercial HVAC portion of the agreement. When Partner qualifies the product, it must meet the specification (e.g., Tier 1 or 2) in effect at that time;
- provide clear and consistent labeling of ENERGY STAR qualified light commercial HVAC models. The ENERGY STAR label must be clearly displayed in product literature (i.e., user manuals, consumer brochures, spec sheets, etc.) and on the manufacturer's Internet site where information about ENERGY STAR qualified models is displayed. It is also recommended that the label appear on the top/front of the product;
- offer and encourage training to distributors and/or contractors on the following issues: air distribution issues and their effect on equipment performance, refrigerant charging, proper installation of registers, duct work, and plenum to ensure low leakage and to meet insulation requirements, and proper use of the Manual N calculation, or other equivalent commercial load calculation, in order to encourage proper sizing of equipment;
- provide to EPA, on an annual basis, an updated list of ENERGY STAR qualifying light commercial HVAC models. Once the Partner submits its first list of ENERGY STAR labeled light commercial and central air conditioner models, the Partner will be listed as an ENERGY STAR Partner. Partner must provide annual updates in order to remain on the list of participating product manufacturers;
- provide to EPA, on an annual basis, unit shipment data or other market indicators to assist in determining the market penetration of ENERGY STAR. Specifically, Partner must submit the total number of ENERGY STAR qualified light commercial HVAC models shipped (in units by model) or an equivalent measurement as agreed to in advance by EPA and Partner. Partner is also encouraged to provide ENERGY STAR qualified unit shipment data segmented by meaningful product characteristics (e.g., capacity, size, speed, or other as relevant), total unit shipments for each model in its product line, and percent of total unit shipments that qualify as ENERGY STAR.

The data for each calendar year should be submitted to EPA, preferably in electronic format, no later than the following March and may be provided directly from the Partner or through a third party. The data will be used by EPA only for program evaluation purposes and will be closely controlled. If requested under the Freedom of Information Act (FOIA), EPA will argue that the data is exempt. Any information used will be masked by EPA so as to protect the confidentiality of the Partner; and

- notify EPA of a change in the designated responsible party or contacts for light commercial HVAC equipment within 30 days.

Performance for Special Distinction

- In order to receive additional recognition and/or support from EPA for its efforts within the Partnership, the ENERGY STAR Partner may consider the following voluntary measures and should keep EPA informed on the progress of these efforts:
- consider energy efficiency improvements in company facilities and pursue the ENERGY STAR label for buildings;
- purchase ENERGY STAR labeled products. Revise the company purchasing or procurement specifications to include ENERGY STAR. Provide procurement officials' contact information to EPA for periodic updates and coordination. Circulate general ENERGY STAR labeled product information to employees for use when purchasing products for their homes;
- ensure the power management feature is enabled on all ENERGY STAR qualified monitors in use in company facilities, particularly upon installation and after service is performed;
- provide general information about the ENERGY STAR program to employees whose jobs are relevant to the development, marketing, sales, and service of current ENERGY STAR labeled product models;
- feature the ENERGY STAR label(s) on Partner Web site and in other promotional materials. If information concerning ENERGY STAR is provided on the Partner Web site as specified by the ENERGY STAR Web Linking Policy (this document can be found in the Partner Resources section on the ENERGY STAR Web site at www.energystar.gov), EPA may provide links where appropriate to the Partner Web site;
- provide a simple plan to EPA outlining specific measures Partner plans to undertake beyond the program requirements listed above. By doing so, EPA may be able to coordinate, communicate, and/or promote Partner's activities, provide an EPA representative, or include news about the event in the ENERGY STAR newsletter, on the ENERGY STAR Web pages, etc. The plan may be as simple as providing a list of planned activities or planned milestones that Partner would like EPA to be aware of. For example, activities may include: (1) increase the availability of ENERGY STAR labeled products by converting the entire product line within two years to meet ENERGY STAR guidelines; (2) provide information to users (via the Web site and user's manual) about energy-saving features and operating characteristics of ENERGY STAR qualified products; and (3) build awareness of the ENERGY STAR Partnership and brand identity by collaborating with EPA on one print advertorial and one live press event;
- provide quarterly, written updates to EPA as to the efforts undertaken by Partner to increase availability of ENERGY STAR qualified products, and to promote awareness of ENERGY STAR and its message;
- join EPA's SmartWay Transport Partnership to improve the environmental performance of the company's shipping operations. SmartWay Transport works with freight carriers, shippers, and

other stakeholders in the goods movement industry to reduce fuel consumption, greenhouse gases, and air pollution. For more information on SmartWay, visit www.epa.gov/smartway;

- join EPA's Climate Leaders Partnership to inventory and reduce greenhouse gas emissions. Through participation, companies create a credible record of their accomplishments and receive EPA recognition as corporate environmental leaders. For more information on Climate Leaders, visit www.epa.gov/climateleaders; and
- join EPA's Green Power partnership. EPA's Green Power Partnership encourages organizations to buy green power as a way to reduce the environmental impacts associated with traditional fossil fuel-based electricity use. The partnership includes a diverse set of organizations including Fortune 500 companies, small and medium businesses, government institutions as well as a growing number of colleges and universities, visit <http://www.epa.gov/grnpower>.



ENERGY STAR® Program Requirements for Light Commercial HVAC

Eligibility Criteria Version 2.0 – FINAL DRAFT

Below is the **FINAL DRAFT** Version 2.0 product specification for ENERGY STAR qualified light commercial HVAC equipment. A product must meet all of the identified criteria if it is to earn the ENERGY STAR.

- 1) Definitions: Provided below are definitions of the relevant terms in this document.
 - A. Central Air Conditioner: A central air-conditioner model consists of one or more factory-made assemblies that normally include an evaporator or cooling coil(s), compressor(s), and condenser(s). Central air conditioners provide the function of air-cooling, and may include the functions of air circulation, air cleaning, dehumidifying, or humidifying. For the purposes of this specification, both split system (i.e., a system with components located both inside and outside of a building) and single package units (i.e., a system that has all components completely contained in one unit) rated at 65,000 Btu/h to <240,000 Btu/h are eligible for ENERGY STAR qualification. In addition, three-phase equipment rated below 65,000 Btu/h may qualify under this Version 2.0 specification if it meets the energy efficiency criteria outlined in Section 3, below.
 - B. Heat Pump: A heat pump model consists of one or more factory-made assemblies that normally include an indoor conditioning coil(s), compressor(s), and outdoor coil(s), including means to provide a heating function. Heat pumps shall provide the function of air heating with controlled temperature, and may include the functions of air-cooling, air circulation, air cleaning, dehumidifying, or humidifying. For the purposes of this specification, both split system and single package units rated at 65,000 Btu/h to <240,000 Btu/h are eligible for ENERGY STAR qualification. In addition, three-phase equipment rated below 65,000 Btu/h may qualify under this Version 2.0 specification if it meets the energy efficiency criteria outlined in Section 3, below.
 - C. Gas/Electric Package Unit: A single package unit with gas heating and electric air conditioning that is often installed on a slab or a roof. For the purposes of this specification, units rated at 65,000 Btu/h to <240,000 Btu/h are eligible for ENERGY STAR qualification assuming they meet the cooling portion of the specification in Section 3, below. In addition, three-phase equipment rated below 65,000 Btu/h may qualify under this Version 2.0 specification if it meets the energy efficiency criteria outlined in Section 3, below.
 - D. Variable Refrigerant Flow (VRF) Multi-Split Systems: A split system air-conditioner or heat pump incorporating a single refrigerant circuit, with one or more outdoor units, at least one variable speed compressor or an alternative compressor combination for varying the capacity of the system by three or more steps, multiple indoor fan coil units, each of which is individually metered and individually controlled by a proprietary control device and common communications network. The system shall be capable of operating either as an air conditioner or a heat pump.

Note: EPA proposes to include VRF multi-split equipment in this Version 2.0 specification. The definition of VRF multi-split systems is referenced in AHRI Standard 1230 – Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment. Stakeholders are encouraged to comment on this definition to ensure that it is accurate and technically sound.

- E. **Cooling Capacity:** The cooling capacity is the quantity of heat in BTU (British Thermal Units) that an air conditioner or heat pump is able to remove from an enclosed space during a one-hour period.
- F. **Energy Efficiency Ratio (EER):** EER is a measure of efficiency in the cooling mode that represents the ratio of total cooling capacity (Btu/hour) to electrical energy input (Watts).
- G. **Coefficient of Performance (COP):** COP is a measure of efficiency in the heating mode that represents the ratio of total heating capacity (Btu) to electrical input (also in Btu).
- H. **Integrated Energy Efficiency Ratio (IEER):** IEER is a measure that expresses cooling part-load EER efficiency for commercial unitary air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities.¹
- I. **Seasonal Energy Efficiency Ratio (SEER):** SEER is a measure of equipment energy efficiency over the cooling season. It represents the total cooling of a central air-conditioner or heat pump (in Btu) during the normal cooling season as compared to the total electric energy input (in watt-hours) consumed during the same period.
- J. **Heating Seasonal Performance Factor (HSPF):** HSPF is a measure of a heat pump's energy efficiency over one heating season. It represents the total heating output of a heat pump (including supplementary electric heat) during the normal heating season (in Btu) as compared to the total electricity consumed (in watt-hours) during the same period.

- 2) **Qualifying Products:** For the purposes of ENERGY STAR, light commercial HVAC equipment includes the following: air-source central air conditioners, air-source heat pumps, gas/electric package units, and VRF multi-split systems. Only three-phase, split system and single package units rated below 240,000 Btu/h are eligible for ENERGY STAR qualification under this Version 2.0 specification.
- 3) **Energy-Efficiency Specification for Qualifying Products:** Light commercial HVAC equipment must meet all of the requirements provided in Tables 1 or 2, below, based on product type as defined in Section 1 above, to qualify for ENERGY STAR.

Gas/Electric Package Unit Note: To qualify for ENERGY STAR, a gas/electric package unit must meet the appropriate air conditioner specification based on its size category.

VRF Multi-Split Equipment Note: To qualify for ENERGY STAR, VRF equipment must be tested in accordance to AHRI Standard 1230 and meet the appropriate air conditioner or heat pump specification based on its size category.

Table 1: Criteria for ENERGY STAR Qualified Light Commercial Air Conditioners

Equipment Type	Size Category	Heating Section Type	Minimum Energy Efficiency Criteria	Test Procedure*
Air-Source Air Conditioner (3 phase – Single Package)	<65,000 Btu/h	All	Tier 1 (May 1, 2010): 14 SEER; 11 EER Tier 2 (July 1, 2011): TBD	AHRI 210/240 or AHRI 1230
Air-Source Air Conditioner (3 phase – Split System)	<65,000 Btu/h	All	Tier 1 (May 1, 2010): 14 SEER; 12 EER	AHRI 210/240 or AHRI 1230

¹ Public Review Draft of the Proposed Addendum s to ASHRAE Standard 90.1- 2007, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, October 2007.

			Tier 2 (July 1, 2011): TBD	
Air-Source Air Conditioner	≥65,000 Btu/h – <135,000 Btu/h	Electric Resistance (or None)	Tier 1 (May 1, 2010): 11.7 EER; 11.8 IEER Tier 2 (July 1, 2011): TBD	AHRI 340/360 or AHRI 1230
		All other	Tier 1 (May 1, 2010): 11.5 EER; 11.6 IEER Tier 2 (July 1, 2011): TBD	
Air-Source Air Conditioner	≥135,000 Btu/h – <240,000 Btu/h	Electric Resistance (or None)	Tier 1 (May 1, 2010): 11.7 EER; 11.8 IEER Tier 2 (July 1, 2011): TBD	AHRI 340/360 or AHRI 1230
		All other	Tier 1 (May 1, 2010): 11.5 EER; 11.6 IEER Tier 2 (July 1, 2011): TBD	

Table 2: Criteria for ENERGY STAR Qualified Light Commercial Heat Pumps

Equipment Type	Size Category	Heating Section Type	Minimum Energy Efficiency Criteria	Test Procedure*
Air-Source Heat Pump (3 phase – Single Package)	<65,000 Btu/h	All	Tier 1 (May 1, 2010): 14 SEER; 11 EER; 8.0 HSPF Tier 2 (July 1, 2011): TBD	AHRI 210/240 or AHRI 1230
Air-Source Heat Pump (3 phase – Split System)	<65,000 Btu/h	All	Tier 1 (May 1, 2010): 14 SEER; 11 EER; 8.2 HSPF Tier 2 (July 1, 2011): TBD	AHRI 210/240 or AHRI 1230
Air-Source Heat Pump	≥65,000 Btu/h – <135,000 Btu/h	Electric Resistance (or None)	Tier 1 (May 1, 2010): 11.3 EER; 11.4 IEER; 3.35 COP Tier 2 (July 1, 2011): TBD	AHRI 340/360 or AHRI 1230 COP rated at 47° F
Air-Source Heat Pump	≥135,000 Btu/h – <240,000 Btu/h	Electric Resistance (or None)	Tier 1 (May 1, 2010): 10.9 EER; 11 IEER; 3.25 COP Tier 2 (July 1, 2011): TBD	AHRI 340/360 or AHRI 1230 COP rated at 47° F

***Note:** Beginning January 1, 2010, test procedures ARI 210/240 and ARI 340/360 will be referenced as AHRI 210/240 and AHRI 340/360, respectively. Test procedure AHRI 1230 is applicable to VRF equipment only.

Note:

Heating Section Type: Based on industry comments on Draft 2, EPA proposes to separate central air conditioners rated at 65,000 Btu/h and under 240,000 Btu/h into heating section type categories (i.e. “electric resistance (or none)” and “all other”) and establish different sets of EER and IEER values for each. Industry sources cite decreased efficiency due to pressure drops from increased fan power consumption caused by gas heating. Therefore, proposed EER and IEER values for “all other” (i.e. gas heat) heating section type equipment are proposed to be 0.2 lower than the EER and IEER values for electric resistance type equipment. The 0.2 EER/IEER deduction is consistent with the U.S. Department of Energy (DOE) and ASHRAE standards for gas equipment.

For air-source heat pumps, EPA has decided not to define performance levels for units greater than 65,000 Btu/h classified as “all other” (i.e. gas heat) because commercial products with this technology are not currently available in the marketplace. If this product type becomes available in the future, EPA will consider its inclusion in the specification. Performance levels proposed for air-source heat pumps greater than 65,000 Btu/h are applicable to electric resistance heat type equipment only.

<65,000 Btu/h Split System CAC/ASHP Tier 2 Levels: EPA will not define Tier 2 performance levels for split system CAC/ASHP equipment below 65,000 Btu/h until 2010 when more data become available. Similar to other equipment categories in this specification, EPA plans to review performance data for <65,000 Btu/h split system equipment beginning in 2010 and determine appropriate efficiency requirements that represent the top 25% of available models for Tier 2.

≥65,000 to <135,000 Btu/h Tier 1 Levels: EPA revisited the AHRI Directory of Certified Products for CAC equipment between 65,000 Btu/h and <135,000 Btu/h on September 4, 2009 and found the compliance rate at the proposed level of 11.5 EER to be 42% for electric resistance equipment, which is much higher than what was found at the time Draft 2 was released, indicating that there is a potential trend toward higher efficiency in new designs. Therefore, EPA is proposing 11.7 EER for electric resistance CAC equipment. The compliance rate at 11.7 EER is 24%, which meets EPA’s goal of representing the top 25% of models available in terms of energy efficiency.

Upon review of available model data in the AHRI Directory for ASHP equipment between 65,000 Btu/h and <135,000 Btu/h, EPA determined that the compliance rates at the EPA’s Draft 2 proposed and AHRI-proposed levels of 11.5 EER and 11.3 EER are approximately 9% and 15%, respectively. Based on this analysis, EPA proposes to adopt AHRI’s suggestion of 11.3 EER for ASHP equipment for this size category.

≥135,000 to <240,000 Btu/h Tier 1 Levels: Upon review of the AHRI Directory for CAC equipment between 135,000 Btu/h and <240,000 Btu/h in early September, EPA determined the compliance rates at levels 11.5 EER and below are higher than EPA’s target 20-25% goal (i.e., 48% for electric resistance equipment). At 11.3 EER for gas heat (i.e. “all other”) equipment, the compliance rate is 50%. Therefore, EPA is maintaining the proposed level of 11.7 EER for electric resistance CAC equipment in this size category for Tier 1.

Stakeholders noted during the EPA stakeholder meeting in August that a greater number of models have high EER ratings at the lower size range of each size category, and as a result, the compliance rates are skewed by the higher efficiency of smaller capacity products. To address this concern, EPA reviewed the AHRI Directory and examined the distribution of EER ratings of models by size. Based on available model data, EPA did not find a clear trend supporting this claim. Interested stakeholders can refer to attached file (“Frequency of EER Ratings by Size and Heating Type.pdf”) that shows the distribution and frequency of EER ratings by size category and heating type. Moreover, available EER/IEER data provided by industry sources show that existing equipment rated between 65,000 Btu/h and under 240,000 Btu/h are able to meet or exceed proposed Tier 1 energy efficiency levels in this version of the specification. As such, EPA did not change the energy efficiency levels as proposed by AHRI.

Note Continued:

Cost-Effectiveness: Based on limited pricing data provided by industry sources, EPA has conducted a preliminary cost-effectiveness analysis of high efficiency CAC/ASHP equipment under 240,000 Btu/h and has determined that equipment that meet EPA's proposed Version 2.0 energy efficiency levels provide a pay-back to the consumer within five years. Stakeholders are encouraged to share pricing or incremental cost data to assist EPA in completing a more comprehensive cost-effective analysis for these products.

VRF Multi-Split Equipment: AHRI recently approved AHRI Standard 1230 for VRF multi-split systems, which covers VRF equipment rated up to 300,000 Btu/h. EPA references this standard in Tables 1 and 2 as the appropriate test procedure for VRF equipment. EPA proposes that VRF equipment meet the air conditioner or heat pump performance levels in this Version 2.0 specification, as appropriate. Once the AHRI certification program for VRF equipment is in place in early 2010 and robust performance data become available, EPA plans to conduct a review and determine if Tier 1 performance levels are appropriate for this equipment type.

- 4) Test Procedure: The manufacturer shall perform energy-efficiency tests, or have tests performed by third party testing labs, as necessary, to determine which products comply. Based on the results of these tests, the manufacturer **shall certify** those products that meet the specification outlined above. Light commercial air conditioners and heat pumps shall qualify under rating conditions in accordance with AHRI 210/240 (formerly ARI 210/240), AHRI 340/360 (formerly ARI 340/360) or AHRI 1230, as appropriate. The test procedure for each equipment type and size category is provided in Tables 1 and 2 of Section 3, above.

- 5) Effective Date: The date that products must meet the requirements specified under the Version 2.0 Light Commercial HVAC specification will be defined as the effective date of the agreement. Any previously executed agreement on the subject of ENERGY STAR qualified light commercial HVAC shall be terminated effective **April 30, 2010**.
 - A. Qualifying Products under Tier 1 of the Version 2.0 Specification: Tier 1 of the Version 2.0 ENERGY STAR Light Commercial HVAC specification shall become effective on **May 1, 2010**. All products, including models originally qualified under the previous Version 1.0 light commercial HVAC specification, with a date of manufacture on or after May 1, 2010, must meet the new Version 2.0 requirements in order to qualify for ENERGY STAR. The date of manufacture is specific to each unit and is the date (e.g., month and year) on which a unit is considered to be completely assembled.
 - B. Qualifying Products under Tier 2 of the Version 2.0 Specification: The second phase of this specification, Tier 2, shall become effective on **July 1, 2011**. All models, including those originally qualified under Tier 1, with a date of manufacture on or after July 1, 2011, must meet the Tier 2 requirements in order to qualify for ENERGY STAR.
 - C. Elimination of Grandfathering: EPA will not allow grandfathering under this Version 2.0 ENERGY STAR specification. **ENERGY STAR qualification under previous Versions is not automatically granted for the life of the product model.** Therefore, any product sold, marketed, or identified by the manufacturing partner as ENERGY STAR must meet the current specification in effect at the time of manufacture of the product.

Note: EPA expects to finalize the Version 2.0 specification no later than November 25, 2009 and propose a Tier 1 effective date of May 1, 2010. EPA has extended the Tier 1 effective date to provide manufacturers additional time to transition product literature and other ENERGY STAR materials prior to the effective date.

On May 1, 2010, new Version 2.0 specification criteria and performance levels will take effect. Once the new Version 2.0 specification takes effect, all ENERGY STAR qualified light commercial HVAC models will be required to meet the new Version 2.0 Tier 1 levels to remain qualified. All existing ENERGY STAR qualified models that met Version 1.0 requirements but do not meet Version 2.0 Tier 1 requirements will be removed from the ENERGY STAR qualified product list unless re-tested and re-submitted by the manufacturer before the Tier 1 effective date. Once delisted, the partner must cease using the ENERGY STAR mark on the product and in relevant product materials. Models that are re-designed and re-tested to meet the new Version 2.0 Tier 1 requirements must be submitted to EPA using a new Qualified Product Information (QPI) form.

Please note that after October 31, 2009, manufacturers may no longer join the program or report qualified light commercial HVAC products under the existing Version 1.0 specification. During this two month period before the new federal minimum efficiency standard takes effect, EPA will transition web-related information to the Version 2.0 specification. Partners, however, may continue to use the ENERGY STAR mark on products and in promotional materials for models qualified under Version 1.0 prior to October 31st.

EPA has revised the effective date for Tier 2 requirements to July 1, 2011. Once IEER data are available beginning in 2010, EPA plans to conduct a review to determine appropriate Tier 2 performance levels as quickly as possible. EPA's goal is to finalize Tier 2 levels by October 2010 and provide manufacturers with time to transition product literature and other ENERGY STAR materials prior to the Tier 2 effective date.

- 6) **Future Specification Revisions:** EPA reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions. In the event of a specification revision, please note that ENERGY STAR qualification is not automatically granted for the life of a product model. To carry the ENERGY STAR mark, a product model must meet the ENERGY STAR specification in effect on the model's date of manufacture.

Variable Refrigerant Flow (VRF) Multi-Split Equipment: Once the AHRI certification program for VRF equipment has been implemented in early 2010 and robust performance data become available, EPA plans to conduct a review to determine if Tier 1 performance levels are appropriate for VRF equipment.

Energy Efficiency Criteria for Single Package Equipment <65,000 Btu/h: In 2010, EPA intends to evaluate Tier 1 performance levels in this Version 2.0 specification for single-package CAC/ASHP equipment rated below 65,000 Btu/h to determine if new levels are warranted for Tier 2. EPA plans to use the performance data provided in the AHRI Certified Directory to establish Tier 2 requirements with the goal of representing approximately the top 25% of available models. Tier 2 is scheduled to go into effect on July 1, 2011.

Energy Efficiency Criteria for Equipment \geq 65,000 Btu/h: EPA intends to revisit the performance levels presented in this Version 2.0 specification for equipment rated at and above 65,000 Btu/h once more IEER data becomes available. This IEER data will help EPA to characterize the market with regard to model availability, evaluate cost-effectiveness, and determine whether the levels in Tables 1 and 2 of this Version 2.0 specification represent the top energy efficiency performers. EPA expects to begin the Tier 2 review process immediately following the Tier 1 effective date (i.e., May 1, 2010). Tier 2 is scheduled to become effective on July 1, 2011.

Similar to the Version 2.0 development process, any revisions to the specification requirements will be shared with industry stakeholders for review and comment.

Note: The text for VRF multi-split equipment has been modified to indicate that once the AHRI certification program is in place and performance data are available EPA will conduct a review of VRF equipment to determine if Tier 1 performance levels are appropriate for this product type.